



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C12Q 1/70		(11) International Publication Number: WO 99/67428
A2		(43) International Publication Date: 29 December 1999 (29.12.99)
(21) International Application Number: PCT/EP99/04317		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(22) International Filing Date: 22 June 1999 (22.06.99)		
(30) Priority Data: 98870143.9 24 June 1998 (24.06.98) EP		
(71) Applicant (for all designated States except US): INNOGENETICS N.V. (BE/BE); Industriepark Zwijnaarde 7, P.O. Box 4, B-9052 Ghent (BE).		
(72) Inventor; and (75) Inventor/Applicant (for US only): STUYVER, Lieven (BE/BE); HOLESTRAAT 8, B-9552 Herzele (BE).		
(74) Common Representative: INNOGENETICS N.V.; Industriepark Zwijnaarde 7, P.O. Box 4, B-9052 Ghent (BE).		Published Without international search report and to be republished upon receipt of that report.
(54) Title: METHOD FOR DETECTION OF DRUG-SELECTED MUTATIONS IN THE HIV PROTEASE GENE		
(57) Abstract <p>The present invention relates to a method for the rapid and reliable detection of drug-selected mutations in the HIV protease gene allowing the simultaneous characterization of a range of codons involved in drug resistance using specific sets of probes optimized to function together in a reverse-hybridization assay. More particularly, the present invention relates to a method for determining the susceptibility to antiviral drugs of HIV viruses in a biological sample, with said method comprising: a) if need be, releasing, isolating or concentrating the polynucleic acids present in the sample; b) if need be amplifying the relevant part of the protease gene of HIV with at least one suitable primer pair; c) hybridizing the polynucleic acids of step a) or b) with at least one of the following probes: probes specifically hybridizing to a target sequence comprising codon 30; probes specifically hybridizing to a target sequence comprising codon 46 and/or 48; probes specifically hybridizing to a target sequence comprising codon 50; probes specifically hybridizing to a target sequence comprising codon 54; probes specifically hybridizing to a target sequence comprising codon 82 and/or 84; probes specifically hybridizing to a target sequence comprising codon 90; or the complement of said probes; further characterized in that said probes specifically hybridize to any of the target sequences presented in figure (1), or the complement of said target sequences; d) inferring from the result of step c) whether or not a mutation giving rise to drug resistance is present in any of said target sequences.</p>		

03/20435-062501